

REMARKS

Applicants have considered the outstanding official action. It is respectfully submitted that the claims are directed to patentable subject matter as set forth below.

Initially, applicants note that non-elected claims 30-40 have been canceled. However, claims 26-29 remain in the application as withdrawn because they are elected claims subject to a species restriction. Upon allowance of independent generic claim 1, claims 26-29 are requested to be rejoined. If claims 26-29 are not to be rejoined but the claims are otherwise in condition for allowance, the Examiner is authorized to cancel claims 26-29. Applicants reserve the right to file a divisional application(s) as to the subject matter of the non-elected claims.

The sole outstanding rejection is of claims 1-25 under 35 U.S.C. §103(a) over U.S. Patent No. 3,229,974 (Banks) in view of U.S. Patent No. 4,521,209 (DuFresne).

Claim 1 is the sole independent claim. Claim 1 claims a folding machine to fold a web material along transverse folding lines including at least one folding roller provided with at least one mechanical gripping member to mechanically grasp the web material along a folding line and a gaseous flow member associated with the at least one gripping member. The gaseous flow member is constructed and

arranged to generate a gaseous flow which inserts the web material into the at least one mechanical gripping member. The mechanical gripping member is constructed and arranged to grasp the web material inserted therein by said gaseous flow.

The Examiner states that Banks discloses gripping members to mechanically grasp the web material along a folding line but fails to disclose a gaseous flow member associated with the gripping member. The Examiner asserts that DuFresne discloses a similar folding machine with a gaseous flow member and that it would have been obvious to have modified Banks' folding machine by including a gaseous flow member based on DuFresne in order to grasp strongly and genteelly to the web while being folded.

Applicants submit that claim 1 does not claim to "grasp strongly and genteelly to the web while being folded" by means of the gaseous flow member. In claim 1, the structure which grasps is the mechanical gripping member, while the gaseous flow generated by the gaseous flow member inserts the web material into the mechanical gripping member. The combination of Banks and DuFresne does not teach or suggest providing in combination a gaseous flow member and at least one mechanical gripping member which are constructed and arranged to, respectively, generate a gaseous flow which inserts the web material into the at

least one mechanical gripping member and grasps the web material inserted therein by the gaseous flow as claimed.

Banks discloses mechanical tuckers 35 to physically push webs of tissue between two jaws 33 and 34. The jaws then pinch and retain the web. Thus, Banks teaches solely mechanical means to position and retain a web. DuFresne discloses vacuum-equipped rollers to hold and retain a web segment to the roller during folding. Accordingly, DuFresne teaches using suction to position and retain a web. Thus, based on the function of the described mechanisms, upon combination of Dufresne and Banks the tuckers and jaws disclosed by Banks would be replaced in their entirety by the vacuum-equipped rollers of DuFresne to avoid duplication of purpose. Neither the primary reference Banks nor the secondary reference DuFresne teaches or suggests using a gaseous flow member to insert a web material into a mechanical gripping member.

DuFresne teaches away from applicants' invention as claimed since the web is pulled in and retained by vacuum to a roller. One skilled in the art, addressing the problem of having a strong but more gentle grasping action in a machine according to Banks, would have used DuFresne's teaching to remove the jaws and the tucker of Banks and replace it with a vacuum device, not use a mechanical gripping member in combination with a gaseous flow member as

claimed.

The invention as claimed includes a gaseous flow member in combination with a mechanical gripping member. The combination of a mechanical gripping member and a gaseous flow member to insert web material in the mechanical gripping member solves the problem of safely and efficiently positioning the web for grasping to fold the web material even at a very high speed (which would not be achievable with the vacuum retention device of DuFresne), even when the web material is of a relatively thick multi-ply material, for example, while at the same time reducing wear and noise such as generated by the coaction of the jaws 33, 34 and tuckers 35 of Banks.

At page 6 of the official action, the Examiner states that the claimed limitation "to insert the web material into said at least one gripping member which grasps the web material" is not given much patentable weight as it is an intended use. Applicants have amended claim 1 to clarify the language. As such, applicants submit that the language of claim 1 includes structural limitations that are not taught or suggested by Banks and DuFresne. In particular, claim 1 requires in combination a mechanical gripping member to mechanically grasp the web material along a folding line and a gaseous flow member which inserts a web material into the mechanical gripping member which then

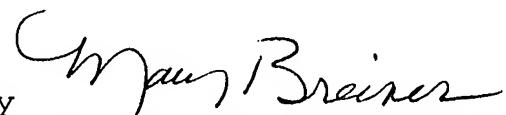
retains the web material therein. Banks and DuFresne upon combination would result in replacement of the mechanical jaws and tucker of Banks with the vacuum rollers of DuFresne. A combination of both members to provide pneumatic and mechanical features in association is outside the scope of what one skilled in the art would have considered and done from the teaching of the two references.

Neither Banks nor DuFresne suggests any motivation to modify the teachings of Banks or DuFresne in order to provide the invention as claimed. Accordingly, applicants respectfully submit that Banks in combination with DuFresne does not render the claimed folding machine obvious within the meaning of 35 U.S.C. §103. Thus, withdrawal of the rejection under 35 U.S.C. §103 is respectfully requested.

Reconsideration and allowance of the application are respectfully urged.

Respectfully submitted,

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